text and to the advertisements, all of which greatly increase its value as a reference book.

The aim of the editor is shown in the following extract from the preface:

> The intention in preparing this work has been to collect and put in convenient form all the reliable statistics of the world; to collect more promptly and more accurately than had hitherto been done the mineral statistics of the United States; and to photograph, as it were, the condition of the industry from year to year, bringing out into boldest relief that information which has the greatest practical value in the development of the industry and which is not easily accessible. . . . This work is above all things designed to be of actual value to the practitioner, to afford those engaged in mining, metallurgy, and industrial chemistry, a safe and authoritative guide which will keep them informed as to what is being done, and how it is done, in each department of the industry throughout the world.

T. C. H.

Honeycombed Limestones in Lake Huron. By ROBERT BELL.

In the Bulletin of the Geological Society of America, Dr. Robert Bell describes the honeycombed limestone of Lake Huron. It is found chiefly about Manitoulin Island, Indian Peninsula, and the area between these and Georgian Bay. The formation progresses faster in water fifty or sixty feet deep, but takes place in shallow water. It is found on the under side of overhanging rocks as well as on other surfaces. There are two principal forms of this erosion. In the first the cavities are elliptical, and neighboring ones tend to meet, giving a very spongy appearance. In the second the pits are finger like and crowded close together at the surface. They are usually shallow, but may be some inches in depth. The rocks in the vicinity of Manitoulin Island run from the Chazy to the Guelph. Dr. Bell finds the pits largest and most numerous in the dolomite of the Guelph formation. As to the immediate causes of the solution to which they are due, Dr. Bell cites an obscure concretionary structure in the rock, and an unusual amount of H_2SO_4 and sulphates in the water. He attributes the source of the sulphur compounds to the Huronian rocks that lie on the north of the lake. These are in part volcanics and rich in sulphides. He thinks solution is aided by hydrostatic pressure, free action of water and shifting currents.

Critical Periods in the History of the Earth. By JOSEPH L. LE CONTE.

The thesis laid down by the author is that "There must have been